Detailed Comments Mitchell Project Area Draft EIS Black Hills National Forest Mystic Ranger District

Water quality

The DEIS states that riparian communities, water quality and fisheries habitat in the Mitchell Project Area (MPA) are negatively affected by improperly located and constructed roads, illegal motorized traffic, livestock grazing, etc. (page 44) The negative effects include sedimentation, changes in vegetation, trampling and resource damage and decreased water quality. The document states that design critera and mitigation measures associated with the action alternatives will mitigate or enhance those conditions. In reviewing the design criteria (Appendix B-2), however, EPA sees nothing that addresses or mitigates for the stated causes for riparian, water quality and fisheries habitat impairment, i.e. roads, illegal motorized traffic, grazing, etc. Therefore, EPA would like to see information that supports the statement that the most heavily treated areas will see proportionally greater improvements to the condition of the resource (page 44).

EPA is also concerned that the preferred alternative includes constructing 7.8 miles of new road, and converting 16.7 miles of unauthorized roads, adding a total of 24.5 miles to the system (page 71), yet does not include road decommissioning. The MPA has a total road density of 4.1 miles of Forest Roads per Forest Acre, not including State, County or private roads. EPA encourages the Forest to consider road closure and obliteration opportunities within the project area, particularly roads close to streams that have stream crossings. This could address some of the riparian, water quality and fisheries habitat issues described above. Also, there is a relationship between higher road density and increased forest use and human-caused fire occurrences, particularly in areas like the MPA with high fuels/fire risk and the wildland/urban interface issues (Cardille J.A., Ventura, S.J., and M.G. Turner, 2001 "Environmental and Social Factors Influencing Wildfires in the Upper Midwest").

For road construction under the proposed alternative, EPA's general recommendations include:

- Minimize road construction and road density to reduce adverse impacts to watersheds
- Locate roads away from streams and riparian areas as much as possible
- Locate roads away from steep slopes or erosive soils
- Minimize road stream crossings
- Stabilize cut and fill slopes
- Provide adequate road drainage and control surface erosion with adequate waterbars, crowns, rolling dips and ditch relief culverts to promote drainage off roads or along roads
- Consider road effects on stream structure and seasonal and spawning habitats when determining alignment

• Allow for adequate large woody debris recruitment to streams and riparian buffers near streams

Wetlands

The DEIS does not identify wetlands in the MPA. Map 2 displays the six seventh level watersheds in the project area, but does not include information on protection, improvement and/or restoration of wetlands and riparian areas. Executive Order 11990 requires all federal agencies to protect wetlands. Wetlands impacts should be first avoided, then minimized to the maximum extent possible. Any unavoidable impacts should be compensated through wetland restoration, creation or enhancement. The national wetlands policy has set an interim goal of No Overall Net Loss of the Nation's remaining wetlands, and a long-term goal of increasing the quantity and quality of our wetlands resources. EPA supports the use of no-harvest buffers to wetlands, and the use of BMPs that restrict heavy equipment operation in wetlands. We also support the identification of wetlands through field visits to each treatment area, so that wetlands are clearly marked on the Sale Area Map. This will ensure that timber contractors can easily avoid impacting those aquatic resources.

Noxious and invasive weeds

The DEIS states that known noxious weed sites within the perimeter of the MPA cover approximately 540 acres (page 126) and that ground disturbance from the proposed project's aggressive harvest and prescribed broadcast burning activities could increase the presence of noxious weeds two-fold, without mitigation. EPA supports the mitigation measures discussed in Appendix B, and the Forest's implementation of the BHNF Noxious Weed Management Plan. The Forest may also want to consider prevention measures including:

- vigilantly monitor and eradicate new infestations
- use certified weed-free seeds
- prevent vehicles from moving freely between infested and non-infested areas
- thoroughly clean the undercarriage of any vehicles or machinery coming into a treatment area
- permit animals to graze weeds only before they flower and set seed
- minimize soil disturbance caused by water, livestock, vehicles or machinery
- create, maintain and monitor boundary strips between infested and non-infested areas
- use good land management practices such as rotational grazing, water conservation, erosion control, revegetation and maintenance of competitive vegetation that can withstand weed invasion.

Wildlife habitat

EPA supports Forest Service consultation with the U.S. Fish and Wildlife Service and the South Dakota Game, Fish and Parks Department to reduce and mitigate adverse fish and wildlife impacts. Appendix B provides some information on mitigation and monitoring for different wildlife species and their habitats, and Appendix E provides a good summary of the Biological Evaluations for Wildlife, Fisheries and Botanical

Resources in the MPA. We encourage the Forest to consider using an adaptive management approach for the bald eagle, the eight sensitive animal species and the nine sensitive plants species in the project area. An effective adaptive management approach would include a strong commitment to monitoring to ensure that the project is meeting objectives and mitigating impacts to habitat. It would also include:

- a decision tree with clear objectives to guide future decisions
- targets/thresholds that specify a desired future condition
- trends specifying a desired change relative to the current condition, especially when trend is more important than condition, or information is lacking to describe future condition
- specific decision thresholds with identified indicators for each impacted resource
- a monitoring plan with protocols to assess whether thresholds are being met
- a firm commitment to use monitoring results to modify management actions as necessary.